

PANTATION !



Sugar Shortage in Italy Sends Louisiana Expert Puts Blame Values To Famine Level

The Dutch factories are at work on the new crop and the suar famine has been broken in Holland. H. C. Priusen-Geerligs states in recent advices pub-

part he says:
"The German authorities have given free the first sixty per cent of the probable 1916-17 sugar production to be distributed to the refiners. The total production is estimated at 1,600,000 tons, only to the extent of nineteen and fiveso that something under one million tons have been made anleable during the months October-Decumber, 1916. Certainly one third of that much was cold in a week's time and as soon as the crop will be taken off, which will happen in the first faulf of October the deliveries to the refineries may commence. The price has been fixed at fifteen marks per fifty kilos raw sugar and eighty-eight rendiment, sacks to be determined to the extent of nineteen and five tent to real the raw juice as it came from the mill. In sulphured unces they increased to forty-aix per cent, and in defacated juice to ninety-one and five-tenths per cent in the raw juice as it came from the mill. In sulphured unces they increased to forty-aix per cent, and in defacated juice to ninety-one and five-tenths per cent.

Professor Owen grew eighteen varieties of bacteria and twenty years from sugar. There seemed to be a good deal of variation in the deteriorative power of the different organisms. Sugars eighty-eight rendiment, sacks to be dewarchouse Magdeburg. The price is therefore three marks over that of the year before, which is only a small increase, compared with the huge rises in price of every other commodity. price of every other commodity. Central European Convention

"The German and Austrian govern-ments have made a convention, in which the regulations, laid down in the Brussels Convention, are kept upright for these two countries. Further the supply of sugar to the Balkan coun-tries and to the Levant has been allotted to Austria, which has obliged itself to refrain from entering into the markets within the sphere of interests DARKENS IN

of the German sugar industry.
"In the occupied part of Poland twenty-one sugar factories have been either totally destroyed or so greatly damaged during the two years of the war that they cannot resume business especially spundant in the eyes and this full, and the beet cultivation has tops, according to investigations of the this fall, and the beet cultivation has tops, according to investigations of the decreased there accordingly. The production of that country, which in nor-darkening of plantations white sugars mai years sent out sugar in great quan- in storage, conducted at the Louisiana fity, will be such that only just suffi experiment station by M. A. Schaneller.

since the sugar consumption has risen practise generally adopted in white suthere from 180,000 tons to 250,000 tons, owing to the increased demands of the results in only temporary decomposimuch from, as none of the usual ex- the sugar. ting countries has sugar to spare, Filtration through bone-black entiretotal crop. Manager Nowell stated
for eight sugar costs in Genon 145 to 150
fire per 100 kilos, to which must be
method has been discarded as too costobtainable the mills which are to grind
ther the freight to destination and the
there is freight to destination and the
transfer of the middlemen. The retail

The retail attention through bone-black entiretotal crop. Manager Nowell stated
total crop. Manager Nowell stated
to the polyphenols, but this
yesterday that from the best advices
obtainable the mills which are to grind
fifty-six per cent of the 1917 crop will
there is the middlemen. The retail
attention of the juices, but would be successed.

among the consumers at a loss for the exchequer.

Russian Statistics Russian Statistics

"The Russian sugar production during the mouths September-June has with extreme difficulty and does not ing the mouths September-June has with extreme difficulty and does not pass into the juice. The came eyes and the second se amounted to 1,667,111 tons against 1,977,585 in the same period of 1914-15. Together with the stock from the foregoing campaign, the year 1915-16 will portation during these ten months was this time 74,673, against 92,516 in the foregoing campaign, therefore leaving for the home consumption respectively. for the home consumption respectively 1,965,704 and 2,188,365 tons. As the stocks at the end of June were 331,411 tons this year and 606,934 tons in 1915 at the same date, we calculate a consumption in the ten months under consideration of 1,634,293 tons in 1915-16 and 1,581,431 tons in 1914-15.

ly reduced, as there must be at any rate some sugar left for the October use too. The same report, namely, scarcity and shortage comes from every part of Europe, strang by contrasting with the plethora of sugar in the big cane sugar producing countries, Cuba and Java.

Java Has Big Crop

'The reports from the less-man-

tioned island continue to be favorable. The prinding proceeds very rapidly, in fuet, many sugar factories have finished their crop at a much earlier date than usually, thereby harvesting uncommon-ly good productions. The toncage of cane is better than we have witnessed tity of 28,505 tons, against 46,495 in the for years, and the sugar content is a year before during the corresponding great deal better. Add to this the very month. In this case the United States high price of sugar then we see what targe profits the Java sugar people will book this year. Government takes of a fair portion in the shape of a special wartax in order to meet the great expense brought along by the defense of the restriction of raw sugar people will be wantaling and Java came second with 3760 that the lowering of temperature is not constant throughout the length of the perature decrease is attained at 7.8 pense brought along by the defense of "The total/importation of raw sugar perature decrease is attained at 7.8 the neutrality and independence, but during the first eight months of the inches from the orifice through which

Britain Has Enough has again been up to the consumption tity of sugar imported in the months. The raw sugar, exclusively cane, came January-August of this year of 1,090, into the amount of 78,990 tons, against 972 tons, calculated on the raw base, no 86,643 tons in the same month of 1915. The sthan 766,455 tons came from Cuba,

There For Deterioration of Sugars In Storage

W. L. Owen of the Louisiana experiment station, after studying the deterioration of sugars in transit and in storage, has formed the conclusion that lished in the Louisiana Planter. In most of the infection takes place in the filter press. The micro-organisms found in sugar do not predominate in

eighty-eight rendiment, sucks to be de from widely separated countries showed

factor of safety, furnishes a reliable criterion of the keeping quality of a sugar, but that its degree of infection must also be taken into consideration."

will be forthcoming. population It is an iron compound, technically known as "iron polyphenol."

Sugar Thirty Cents in Ttaly

"The economist Enaudi believes a that the bleaching action of sulphur sugar famine to be imminent in Italy, since the sugar consumption has rises."

"In a recent report Schneller states that the bleaching action of sulphur since the sugar consumption has rises." army. The home production will certion of the iron compound. In storage, thinly not exceed 150,000 tons, so that exidation takes effect on the traces of the balance ought to be imported, but iron compounds adhering to the sugar the great question is where to get that crystals with consequent darkening of

The coloring matter of cane fiber, he says, does not yield dark-colored iron compounds. It can only be separated tops are especially rich in soluble color ing matters, however.

STEADY LAST WEEK

According to cabled advices received by one of the sugar houses, sales of "The consumption in ten months has been 1,634,293 or in two months it is equivalent with 360,000 tons. The total stock will, therefore, disappear, if the consumption was to remain the same as during the already clapsed part of the campaign, which clearly shows that consumption will have to be greatly reduced, as there must be at any rate layer and 1,681,431 tons in 1914,000 bags Cubas, 9000 bags Porto Ricos and 2912 tons full duty. Refiners were not interested in small offerings of Cubas at 5.52, equivalent to 6.53 duty paid. The market closed steady.

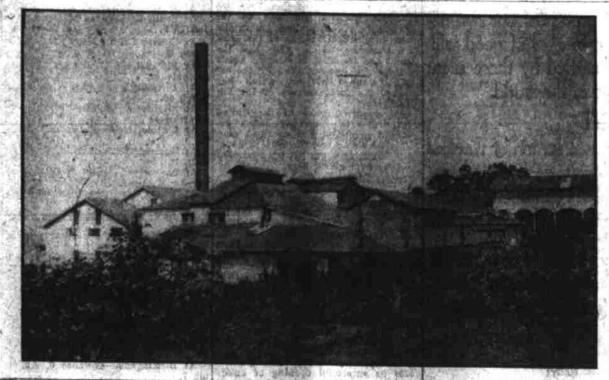
It is estimated that the coming Philippine crop will be only 220,000 long raw sugar at New York during the It is estimated that the coming Philippine crop will be only 220,000 long tons as against the present crop of 315,000 tons, according to latest reports.

More Kona Cigars

A new Hawaiian cigar manufactured especially for H. Hackfeld & Company, with Kona wrapper, and a blend of Kona. Cuban and domestic filler, is being distributed. Cigars made of Hawelian tobacco are much in demand on the Pacific Coast,

the scutranty and independence, but during the first eight months of the inches from the orifice through which anyhow a nice profit will remain to console the proprietors with the unfavorable regults of some of the latter years. ply of refined was respectively 317,618 variable factors relating to this sub-Britain Has Enough
The sucur importation into Great year was better in both assortments Britain during the month of August than its predecessor. Of the total quan-

THE entire machinery of Pacific Sugar Mill has been sold by F. A. Schaefer & Co. to Mr. Shimamura representing the Tokyo Sugar Company of Japan. This mill will be repaired, renovated and modernized by the Honolulu Iron Works and then shipped to Formosa. Pacific was at one time the "show" mill of Hawaii, but this plantation and Honokaa are now operated under one management and Honokaa mill does all the work for the two.



SUGAR FACTORS

The first preliminary estimate of the 1917 erop by A. M. Nowell, manager | Soils Compared With Forof the Sugar Factors' Company was is sued yesterday. According to figures secured from reliable sources the 1917 erop will amount to not less than 641. 570 short tons, provided weather conditions are normal.

The plantations on Hawaii are ex-pected to yield 241,150 tons; Mani, Kauni, 112,570 tons. Reduced to the conducted with forty-six soils from standard in which the world's crop is wall and twenty foreign countries. figured by sugar authorities, the Sug ar Factors estimate is equivalent to 572,800 long tons.

This may be compared with the figares 625,000 long tons given by Willett's Sugar Bulletin, and 575,000 long tons given by Willett & Gray. Statistical Details

The Factors will ship about 526,000 wrotts of the middlemen. The retail varies will, therefore, be about three lire in the further contact with iron would be successful only if further contact with iron would be completely avoided. Hence, it is importation by government and distribution at a low price improvement, this author states. barwest January 1, 1917; 85,100 tons January 15; and 9850 tons by mills ommencing February 1.

The present selling contracts under which the Sugar Factors deliver a part of the crop to Atlantic Coast remain in effect to September 30 next. The Eastern buyers are the Pennsylvania Sugar Refining Company at Philadel-phia and B. F. Howell Sons & Company New York.

LABOR SCARCITY IN FRANCE DELAYS BEET HARVEST

Journal des Fabricants de Suere, dated Paris, October 11, 1916, says: The mean temperature of the fortnight was 14.3, against a normal of 12.5. The weather during this period has been mild for the season, and frequently wet. Under the influence of the warmth and moisture the beetroots have progressed vigorously, and gained considerably in weight. Owing to the weather condirions being so favorable to the growth of the plant the cultural yield will considerably exceed that of last year, which was very small.

With regard to the quality there are frequent statements of a setback in the density of the juice, owing to the late rains and to the spacing of the plants. From this point of view and also to facilitate the pulling and carrying a period of fine weather is desirable. There are complaints in various directions of searcity of labor, and prisoners are not placed at the disposition of the farmers and of the manufacturers in

Heat Loss From Jets

Recent studies on the theory of tem-perature changes in hot sprays may be interesting to engineers. Two French ject, these investigators state.

Maui Plantations

Private advices from plantation em-Java sent 30.786 tons, Cuba 23.407, either direct or through the intermediate 4695 and Brazil 2341. The diary of the refineries of the United Mauritius 4695 and Brazil 2341. The diary of the refineries of the United Mauritius 4695 and Brazil 2341. The diary of the refineries of the United Mauritius 4695 and Brazil 2341. The diary of the refineries of the United Mauritius 4695 and Brazil 2341. The diary of the refineries of the United Mauritius 4695 and Brazil 2341. The diary of the refineries of the United Mauritius 4695 and Brazil 2341. The diary of the refineries of the United Mauritius 4695 and Brazil 2341. The diary of the refineries of the United Mauritius 4695 and Brazil 2341. The diary of the refineries of the United Mauritius 4695 and Brazil 2341. The diary of the refineries of the United Mauritius 4695 and Brazil 2341. The diary of the refineries of the United Mauritius 4695 and Brazil 2341. The diary of the refineries of the United Mauritius 4695 and Brazil 2341. The diary of the refineries of the United Mauritius 4695 and Brazil 2341. The diary of the refineries of the United Mauritius 4695 and Brazil 2341. The diary of the refineries of the United Mauritius 4695 and Brazil 2341. The diary of the refineries of the United Mauritius 4695 and Brazil 2341. The diary of the refineries of the United Mauritius 4695 and Brazil 2341.

Nitrogen Fixation In Our Cane eign Soils

"Nitrogen Fixation and Azotobacter Forms" is the title of a paper pubpshed by C. B. Lipman and P. S. gess in a recent number of Centralblatt four Bacteriologie. Doctor Burgess is chief chemist of the H. S. P. A. experi-155,850 tons; Oaku, 132,000 tons; and ment stotion. The experiments were conducted with forty-six soils from Ha-

The plan of the experiment "consist ed in studying the appearance of the cultures obtained from soil innoculation into a mannite solution, making a microscopic study of the mixed flora, and determining the nitrogen-fixing owers of the bacteria isolated. Sixfeen of the soils were obtained in Hawaii, and it was apparently proved tons or eighty-three per cent of the that the Azotobacter, or nitrogen-fixing total crop. Manager Nowell stated organism, was not a gas former. The is purely technical,

-++---BATTELLE PROCESS ADOPTED two BY BIG CUBA CENTRAL

E. E. Battelle, president and manager of the Battelle Sugar Refining Comany, arrived on the Great Northern esterday and will spend two or three esks in Honolciu. This company was rganized here about three years ago

ith local backing.
After a lot of hard work the manger has secured a contract for putting on process into one of the largest sufactories in Cuba. A meeting of shareholders will be called shortly the purpose of devising ways and nouns to carry on the work. R. Renton Hind stated yesterday that the out look for the final success of this enter prise is very bright.

Louisiana Experiments

A comparative test of nitrogenous fertilizers at the Louisiana sugar experiment station showed that calcium named ranked close to nitrate of soand sulphate of ammonia. Calcium nitrate did not prove so satisfactory. A mixture of 500 pounds of cotton

seed meal and 250 pounds superplosphate per acre increased the yield 2.7 ions of cane; while 500 pounds cotton seed meal and 500 pounds suuperphos phate gave an increase of 8.9 tons. ompared with no fertilizer. Tankage as a source of nitrogen gave similar re

Theory Untenable

J. Kuijper, one of the experts emstation has carefully investigated the inestion of whether there is any physiological unity' between a canleaf and its internode, that view hav sufficient number to give adequate as He declares in a recent report that sistance.

Japan Sells To Russia According to latest Japan Adverticer

outracts have been made.

The lergest orders are one of 180 demonstrated that the yield can be

tons received by the Teikoku Sugar, materially increased by spraying affectnd another for "on tons by the Javan ed trees with Bordeaux mixture. Prun-Sugar. Only eighty tous have been ing is also said to lessen the degree of shipped, the remainder awaiting ship-infection. ment because of the lack of bottoms.

French Crop Damaged

The sugar beet leaf-spot disease is re-

of the sugar houses reports as follows concerning market conditions during the weeks ending November 2,

"This murket may now be said to be in a state of equilibrium. The halting tendency of the past few days is cause of anxiety to the bullish element and retiners are, holding off until the trend of prices becomes a little more obvious.

"Operators have again commenced buy such lots as refiners either reect or display no interest in, and the British Commission must soon begin purchasing a substantial quantity of new erop Cubas for January to March shipment, hence the need for sustaining the murket.

holding firm at 4c f. o. b. Cuba for Robinson, Januar Heavy rains are again reported from the Island, which, of course, means cone is not yet ripening. Cuban Election Significant

"The defeat of Senor Menocal for President by Senor Zayas, the leader f the so-called Liberal or Negro ele ment in the electorate, is a fact that may not be of serious import. Menocal has proved himself a strong clean men while in office and a return to the Gomez Mens form of government is extendated to cause no little apprehension in the minds of those who wish

. see peace and order continue.
. The course of the exchange market these past few days has been very erratic and again appears to be in the throes of manipulation. The statistical position is still very strong. Stocks in Cuba are down to 150,000 tons, not more than three weeks supply, even if it all came here or could be brought

here in that time." and importers combined would not be more than enough for one week's melt Last weeks 53,000 tons was the melt. flowever, the beat harvest is now in all swing and the Louisiana cane crop is being gathered under very favorto serious scarcity of sugar unless the ongestion on the railroads continues unrelieved.

HEMILEIA VASTATRIX ON PHILIPPINE COFFEE TREES

The dread coffee rust, Hemileia vastatrix, which wiped out the coffee in-dustry of Ceylon thirty years ago is the most destructive coffee disease in the Philippines, according to the Philippine Agriculturist and Forester. The becrease in the output of coffee during the last ten years is attributed to the "since it became known that Rus rapid spread of Hemileia and lack of has abolished custom duties on su-knowledge on the part of the growers for a limited time, demands for as to modern methods of agricultural

A Louisiana Seedling

Louisiana experiment station has ployes on Mani are that Hawaiian ported to have been unusually preva-created a new seedling, L511, contain-Commercial will begin grinding one lent and destructive in the region ing 14.9 per cent of sucrose, or 4.5 to 5 week from today. November 22, and around Paris and the country to the ner cent more than is contained in the

Javan Investigator Studies Loss High Price Is Only Noteworthy of Water By Leaves of Cane Varieties

The Java sugar experiment station has carried on a number of investigations to test out the theory advanced by West Indian scientists that there is a direct relationship between the number of stomats, or breathing pores, on the leaves and the sugar producing canacity of case. If this observation Stocks in the United States and was correct it would make the problem Cubn together were 200,824 tons, one of transpiration.

J. K diper, in Archiev voor Suiker. 386,864 tons inst year, a dindustrie, states that the daily trans | 166,020 tons from last year. piration of water in one variety may! double that in another. No connection reaching New Orleans in increased was established between transpiration quantity and a goodly portion of the rate and stomath count of the leaf area. 'he maximum transpiration rate tic Forts. may be reached after the stomata have begun to close, the rate of loss of water being in a measure independent of sto-matal behavior. Decrease of light the 350,000 bag contract made with the cheeks transpiration. The varietal dif. American, and sugars to be refined on a ferences in transpiration rate are toll basis. The crop is now moving thought to be important as giving a more capidly and receipts at New Orleans are about 2,500 tons per day, for certain conditions of soil and eli-

When cane was supplied with an abundance of water the transpiration lated is quoted at 7.05c. rate was approximately doubled. The Stocks Are Sleeder different varieties of cane tested were different varieties of cane tested were divided into three groups. One group attained the maximum rate of transpiration early in the morning, another at eleven o'clock, while in the third group of varieties there was practically no difference in amount of water vaporated during the whole day. These differences in the utilization of avail-The New York correspondent of one to the differences in production and in resistance of drought.

ESTIMATES OF MILLS SELLING TO WESTERN

C. Brewer & Company, Hawaiian agents for the Western Sugar Refining Company yesterday announced the reason why these operators are now 1917 estimates and probable dates on off ring 5.7-like C. & F. for Cuban which some of the mills under contract in any position is believed to be that 1917 estimates and probable dates on which some of the mills under contract est, as fellows:

Hutchinson, January 2, 8000 tons; Pasuhau, January 8, 10,000 tons; Kil-auea, December 1, 5570 tons; Hilo Sugar Co., January 8, 15,000 tons; 'It is said that these interests are Olowalu, January 3, 1850 tons; Gay & months and that they have ken, February 2, 1500 tons; Kona Deformed a sort of selling syndicate, thus pooling the sugars under their control. Knudsen Estate, date dependent on From present appearances they are like. Kekaha, 900 tons; Laie, date dependent to meet with no serious obstacle, as ent on Kahuku, 1000 tons; Hakniau, quantity of old as vell as new January 3, 19,000, and Waiauae, February offering is very limited. ruary 1, 4600 tons.

HIS SORE HANDS **CURED IN A WEEK**

Cracked Open, Bled, Burned and Ached for Over a Year—Could Not Sleep nor Even Dress Himself - Doctors Failed to Help Him.

MAN OF 70 OWES SKIN COMFORT TO CUTICURA



T am a man seventy years old. My hands were very sore and cracked open on the insides for over a year with large sores. They would crack open and bleed, itah, burn and ache so that I could not sleep and could do but little, work. They were so but that I could not dress myself in the morning. They would bleed and the blood dropped on the floor. I called on two dectors, but they did me no good. I could get nothing to do meany good till light the Cuticura Seap and out box of Cuticura Seap and one box of Cuticura Dintment and in one week from the time I began to use them my hands were all healed up and they have not been a mite sore since. I would not be without the Cuticura Remedies.

"They also cured a bad sore on the band of one of my neighbor's children, and they think very highly of the Cuticura Remedies. John W. Hasty, So. Effingham, N. H., Mar. 5 and Apr. 11, '09."

For Baby's Skin

The purest, sweetest and most economical method of preserving, purifying and beautifying baby's delicate skin, scalp and hair is the constant use of Cuticura Soap, assisted, when necessary, by gentle applications of Cuticura Ointment. For rashes, itchings, inflammations and chafings of infants, children and adults, as well as for shaving, shampooing, sanative, antiseptic cleansing and all purposes of the toilet, bath and nursery Cuticura Soap and Ointment are unrivaled.

Cuticura Soap (35c.), Cuticura Ointment (50c.)

are unrivaled,
Cuticura Boap (25a.), Cuticura Gintment (50c.),
and Cuticura Reservent (50c.), cor in the form of
Chocolate Coated Pills, 25c. per vial of 50; are add
throughout the world. Potter Drug & Chem. Corp.
Sole Props. 135 Columbus Ave., Boston, Mass.
ar 32-page Cuticura Rook, mailed tree, girling de-

Feature of Week's Business

Sales of raw sugar at New York during the week ending November 2 were 37,000 bags Cubas, 1,500 tons Bruzils and 670 tons Perus according to Willett & Gray.

366,864 tons inst year, a decrease of Louisiana new crop sugar is now

Louisiana advices report that fully

clined in sympathy with New York from 6,30e to 6,15c. Plantation Grans-The Stocks Are Slender
were The supplier of raws for Novemberyear. These figures speak for themselves as to the course of the market

before new erop Cuba supplies become available is quantity.

New crop Cubas have been freely offered on a cost and freight basis of

A type for Wennary and twee for February April slipment.

Cable arrives from England report that there have been heavy offerings of new crop Cubas at 4c f.o.b. Cuba.

Cuba Gets Rain

Cuba Gets Rain

The exports of the week increased considerably, being 40,946 tons to the U.S. Atlantic Ports (sufficient with the arrival of sugars from other countries to cover refiners' meltings) and 6,670 tons to Europe; a total of 47,616 tons. Stacks in the Island stand at 143,194 tons, against 181,778 tons at this time last year. Heavy rains have occurred in the eastern provinces, while unsettled weather is reported in while unsettled weather is reported in the western end. Later cables state that the weather is warm and unsettled. Heavy rains have fallen in Oriente and sorthern Pinar del Rio Provinces, with variable precipitation throughout the balance of the Island.

French Statistics French Statistics for the year ending September 1 show production this year less than half that of the preceding year 135,899 tons, against 302,961 tons, while imports are much larger this year-532,721 tons, against 306,861 tons. Consumption was reduced to 565,014 tons, against 638,674 tons last year. Approximate stock at the end of year 14,000 tons, which is guring very close, it would seem.

Refined Sugars

The demand for refined has been light during the week, both for export and local use. Sugars from second hands are obtainable at 7.40c basis. Refiners call attention to the closing of lake navigation from October 31 to November 14, and advise the trade hat if it is not possible to ship sugars in time the lake and rail rate, the all-rail freight rate will be added.

Domestic Beet sugars are offered at 7.30c for all territory West of Buffalo and Pittsburg. Prompt shipment can be obtained from some of the factorics, while others are delayed owing to sales made before the factories were

able to start operations.

The export asking price is about 6.40c, net cash, in hond, with sugars obtainable from second hands ten to afteen points cheaper.

PINEAPPLE PACKERS **BUILD SUGAR MILL**

A six-roller mill is being installed at libby, McNeill & Libby's Pineapple enthery at Kalihi, by the Honolulu Iron Works. It will be used to decrease the moisture content of the pineapple refuse so that this can be burned. The first three-roller set is a 30 x 54 inch mill bought from Hawi planth-tion, Kohala, and the second set is a 30x60 inch set bought from Union Mill Company. These mills, with full train of g-ars and a 12x36 slide-valve engine are to be set in a new mill 32x48 feet. A traveling erane will be installed the

full length of the building.

When the pineapple bagasse has been proceed dry it will pass to the Allis-Chalmers incinerator erected a year ago. The new installmen replaces a outtery of three Worthington presses impliced last year for the same pur-The new six-roller mill will be ready o operate during the winter packing eason soon to commence.

Married or manufacture Kohala Very Dry

The weather are een so dry in Ko-hala that some of the mills will begin grinding max wask or at least by the first of December. This is a full month earlier than Kohela alentations usually commence their harvest.